

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Robert J. Thomas and Robert W. Daly

Title: GAS SYSTEMS AND METHODS FOR ENABLING RESPIRATORY
STABILITY

Date: 11/18/03

EXPRESS MAIL LABEL NO. EV 215729811 US

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or
(First/Second submission after Final Rejection)
- ☒ under 37 CFR 1.97(b), or
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, or
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, and
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
- ☒ Copies of the cited references are enclosed.
- ☒ Since this application was filed after June 30, 2003, copies of issued U.S. patents and published U.S. applications are not required and are not being provided.
- ☐ Copies of the cited references are enclosed except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☐ The "concise explanation" requirement (non-English references) for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
- ☐ the explanation provided in the Specification.
- ☐ submission of the enclosed International Search Report.
- ☐ submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action.
- ☐ the enclosed English language abstract.

☐ Applicant requests that the following non-published pending applications be considered:

Examiner's
Initials

____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []
____ U.S. Patent Application No. [], by [inventor(s)], filed [], Docket No.: []

Examiner

Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.


It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☐ Please charge Deposit Account 08-0380 in the amount of \$[]. A copy of this Statement is enclosed.
- ☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 
Mary Lou Wakimura
Registration No.: 31,804
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 

PTO-1449 REPRODUCED INFORMATION DISCLOSURE CITATION IN AN APPLICATION November 18, 2003 (Use several sheets if necessary)	ATTORNEY DOCKET NO. 1440.2032-000		APPLICATION NO.	
	APPLICANT Robert J. Thomas et al.			
	FILING DATE	CONFIRMATION NO.	GROUP	

U.S. PATENT DOCUMENTS				
EXAM- INER INI- TIAL	REF. NO.	DOCUMENT NUMBER	ISSUE DATE / PUBLICATION DATE	NAME
/NP/	AA	6,029,660	02/29/00	Calluad et al.
	AB			
	AC			
	AD			
	AE			
	AF			
	AG			
	AH			
	AI			
	AJ			
	AK			
	AA2			
	AB2			
	AC2			
	AD2			
	AE2			
	AF2			
	AG2			
	AH2			
	AI2			
	AJ2			
	AK2			
	AA3			
	AB3			
	AC3			

EXAMINER /Nihir Patel/	DATE CONSIDERED 04/24/2008
---------------------------	-------------------------------

PTO-1449 REPRODUCED INFORMATION DISCLOSURE CITATION IN AN APPLICATION November 18, 2003 (Use several sheets if necessary)	ATTORNEY DOCKET NO. 1440.2032-000		APPLICATION NO.	
	APPLICANT Robert J. Thomas et al.			
	FILING DATE		CONFIRMATION NO.	GROUP

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
/NP/	AR	Lorenzi-Filho, G. et al., "Effects of Inhaled Carbon Dioxide and Oxygen on Cheyne-Stokes Respiration in Patients with Heart Failure," <i>American Journal of Respiratory Critical Care Medicine</i> 159:1490-1498 (1999).
/NP/	AS	Javaheri, S. and W.S. Corbett, "Association of Low PaCO ₂ with Central Sleep Apnea and Ventricular Arrhythmias in Ambulatory Patients with Stable Heart Failure," <i>Annals of Internal Medicine</i> 128:204-207, 2/1/98.
/NP/	AT	Xie, A. et al., "Apnea-Hypopnea Threshold for CO ₂ in Patients with Congestive Heart Failure," <i>American Journal of Respiratory Critical Care Medicine</i> 165(9):1245-50, 5/1/02.
/NP/	AU	Topor, Z.L. et al., "Dynamic ventilatory response to CO(2) in congestive heart failure patients with and without central sleep apnea," <i>J. Appl. Phys.</i> 91(1):408-16, July 2001.
/NP/	AV	Nattie, E., "CO ₂ , Brainstem Chemoreceptors and Breathing," <i>Progress in Neurobiology</i> 59(4):299-331, Nov. 1999.
/NP/	AW	Javaheri, S., "A Mechanism of Central Sleep Apnea in Patients with Heart Failure," <i>The New England Journal of Medicine</i> 341(13):949-54, September 23, 1999.
/NP/	AX	Xie, A. et al., "Effects of inhaled CO ₂ and added dead space on idiopathic central sleep apnea," <i>J. Appl. Physiol.</i> , 82(3):918-26, March 1997.
/NP/	AY	Xie, A. et al., "Hypocapnia and Increased Ventilatory Responsiveness in Patients with Ideopathic Central Sleep Apnea," <i>American Journal of Respiratory and Critical Care Medicine</i> , 152(6 Pt 1):1950-5, December 1995.
/NP/	AZ	Badr, M.S. "Treatment of Refractory Sleep Apnea with Supplemental Carbon Dioxide," <i>American Journal of Respiratory and Critical Care Medicine</i> 150(2):561-4, August 1994.
/NP/	AR2	Thalhofer S. and P. Dorow, "Sleep-Breathing Disorders and Heart Failure," <i>Sleep and Breathing</i> 4:(3)103-111, 2000.
/NP/	AS2	Teschler, H. et al., "Adaptive Pressure Support Servo-Ventilation: A Novel Treatment for Cheyne-Stokes Respiration in Heart Failure," <i>American Journal of Respiratory Critical Care Medicine</i> 164:614-619, 2001.

EXAMINER /Nihir Patel/	DATE CONSIDERED 04/24/2008
---------------------------	-------------------------------

PTO-1449 REPRODUCED INFORMATION DISCLOSURE CITATION IN AN APPLICATION November 18, 2003 (Use several sheets if necessary)	ATTORNEY DOCKET NO. 1440.2032-000		APPLICATION NO.	
	APPLICANT Robert J. Thomas et al.			
	FILING DATE	CONFIRMATION NO.	GROUP	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
/NP/	AT2	Krachman S.L. et al., "Comparison of Oxygen Therapy with Nasal Continuous Positive Airway Pressure on Cheyne-Stokes Respiration During Sleep in Congestive Heart Failure," <i>Chest</i> 116:1550-1557, 1999.
/NP/	AU2	Lorenzi-Filho, G. et al., "Effects of Inhaled Carbon Dioxide and Oxygen on Cheyne-Stokes Respiration in Patients with Heart Failure," <i>American Journal of Respiratory Critical Care Medicine</i> 159:1490-1498, 1999.
/NP/	AV2	Pack A.I. et al., "Modafinil as Adjunct Therapy for Daytime Sleepiness in Obstructive Sleep Apnea," <i>American Journal of Respiratory Critical Care Medicine</i> 164:1675-1681, 2001.
/NP/	AW2	Francis, D.P. et al., "Quantitative General Theory for Periodic Breathing in Chronic Heart Failure and its Clinical Implications," <i>Circulation</i> 102(18):2214-2221, October 31, 2000.
	AX2	

EXAMINER /Nihir Patel/	DATE CONSIDERED 04/24/2008
---------------------------	----------------------------